College of Arts and Sciences
Department of Nutrition
FDNT 421 Community Nutrition I
Autumn Quarter 2000
Tentative Syllabus

Instructor: Alfredo Mejia, MS, RD, DrPH

Office: Marsh Hall 313

Telephone: Office: 471-3386

Class Meets: Marsh Hall 318

1:30-3:20 Wednesday

Course Description: Identifying the nutrition needs of a community and learning how to plan, implement, and evaluate community nutrition programs. Analysis of current nutrition programs and services at the local and national level. The impact of nutrition policies and legislation on the health of a community. Prerequisites: FDNT 310

Service class: Community Nutrition I & II meet the requirements for "S" courses which are part of the general education class at Andrews University. Consequently, over 25% of those Class are devoted to supervised, off campus, service-learning activities.

Outcome objectives:

Upon completion of Community Nutrition I, the students will:

- 1. Assess the needs of a target population in the local community
- 2. Apply core elements of communication and education theory to design nutrition education interventions.
- 3. Plan/design an theory based intervention to address specific problems identified in the community assessment
- 4. Complete a log in a journal a minimum of 20 hours of supervised service for the community. Evidence of this service will be documented with in a journal in a weekly basis.
- 5. Write a process evaluation of their service-learning experience.
- 6. Write and present and discuss in class/Lab a reflective experience of his/her service experience.

Activities:

Develop an assessment plan for a specific target population.

Assess the health and nutritional needs of a population

Present the assessment in class

Plan a nutrition education intervention to meet identified nutrition needs of a specific target population Present the plan in class

Create a proposal for a mini project using the VENDERS format.

Create a mini project with the VENDERS format.

Create a culminating project, including the assessment and plan of a nutrition education intervention.

Presentations as outlined in syllabus.

Participation on group activities

Textbook(s):

Community Nutrition In Action: An Entrepreneurial Approach by Boyle MA, Morris DH. Minneapolis/St Paul, MN: West, 1999

Communications and Educational Skills for Dietetics Professionals 3rd Edition by Betsy B. Holli and Richard J. Calabrese. Baltimore: Williams & Wilkins. 1998.

Teaching Patients with Low Literacy Skills 2nd *Edition* by Doak CC, Doak LG, Root JH. Philadelphia: J.B. Lippincott Company. 1996.

Course Requirements:

Percent of grade

| Assessment & capacity mapping Plan (20%) | 20% |
|--|------|
| Written report (20%) | |
| •Verbal reports, Power Point presentation (20%) | |
| ■Utilization – Assessment → action (40%) | |
| Food Demonstrations | 10% |
| Midterm exam – mini group project – VENDERS format | 20 % |
| Community nutrition program proposal | 40% |
| •Community assessment and capacity mapping (25%) | |
| •Goals and objectives (25%) | |
| •VEND-RS (25%) | |
| Outcome Evaluation plan (10%) | |
| Proposal presentation in class (15%) | |
| Monitoring system | 10% |
| Design a system with tools (50%) | |
| ■Two reports of project progress (50%) | |

| Midterm exam-group project | 15% |
|---|-----|
| Mini Projects (2) | 20% |
| Community assessment plan (Report & presentation) | 5% |
| Results of community assessment (Report & presentation) | 15% |
| Preliminary community intervention plan (Report & presentation) | 15% |
| Final VENDERS proposal for a community intervention plan | |
| (Report & presentation) | 30% |

Note: Approved project should be supported with at least 10 references from professional journals, within 5 years. JADA references format with annotations; may duplicate needed references for laboratory, but must be labeled for both assignments.

Evaluation:

| A | 4.00 | 94-100 | Outstanding work | B- | 2.67 | 80-82 | Good work |
|-----------|------|--------|------------------|----|------|-------|--------------------|
| A- | 3.67 | 90-93 | Excellent work | C+ | 2.33 | 77-79 | Just above average |
| B+ | 3.33 | 87-89 | Very good work | C | 2.00 | 73-76 | Average work |
| В | 3.00 | 83-86 | Good work | C- | 1.67 | 70-72 | Below average |

A grade of C- or below is not acceptable for dietetics students.

Tests (exams) will cover mainly the material covered in class plus the material of handouts and designated sections of the textbook(s). The test format might include multiple choice, fill in, short answer and essay questions. The content of the tests will not focus merely in recalling facts. Although factual information is required, tests will require from the student a higher learning level, including comprehension of the principles learned; application of knowledge to professional practice; analysis of factual data to identify the major elements and their interactions, and to choose the best course of action when there are several alternatives solutions; integration of knowledge to organize diverse elements into a coherent unit; generalization (creative application of knowledge to develop something new); and evaluation or the ability to judge the value of materials or methodologies in particular situations.

Community assessment: The students will develop a theory based community **assessment plan** and will **present it class**. Also they will turn in a **hard copy** of the assessment plan to the instructor. <u>After the assessment plan has been approved</u> the students will **conduct the assessment** of nutrition and health needs of the selected target population.

All papers should follow the "Guidelines for Written Assignments" from the Andrews University Nutrition Department. All reports and written assignments will have a penalty applied of 10% per day late after a 24-hour grace period. Papers will be dated when received to ensure accurate computation of penalties. In all cases, **the absolute deadline for receiving any credit for any assignment is noon Friday before exam week**. Requests for exceptions must be accompanied by medical excuses; an adjusted due date must be agreed upon.

Late work:

Late exams and assignments will receive a 5% grade deduction after a 48 hours grace period after the deadline. If the student is sick the instructor could wave the grade deduction; but the instructor will reserve the right to ask for a written medical note from the physician when there is late work due to disease. The final projects and assignments will not be accepted after the Friday prior to the final exam week.

Class attendance & punctuality:

Attendance is expected. The instructor will record attendance and will deduct up to 5% of the final grade if there is less than 20% of absences to classes and laboratories. If the student is absent more than 20% of the class and laboratory time can get a failing grade. Three tardiness (10 minutes late) equal to one absence. See more information in *Andrews University 2000-2001 Bulletin*, p. 19. Failure to complete group work on time will not jeopardize grading for the rest of the group, but will undoubtedly have serious social consequences.

Teaching method:

Introduction of concepts

Activity to apply concepts

Concept mapping: Revisit the global schema to fit each element in whole relationship of each element to the larger schema.

Outline of the final project:

- ■Cover page
- ■Table of contents
- ■Introduction overview of the complete project
- ■Literature review
 - ■The problem
 - ■Documentation of the extent and nature of the problem addressed from:
 - Literature
 - Assessment & capacity mapping
 - Current solutions (methods)
 - ■Current solutions or absence of solutions to the problem

- ■Proposed solution (methods)
 - ■Document the track record & competitive advantages of the proposed methodology
- ■Program planning (VENDERS format)
 - ■Theory based programming
 - Needs assessment & capacity-mapping-based programming
- Appendixes
 - ■Assessment & capacity mapping
 - ■Nutrition classes: outlines, learning objectives, activities, video tape, and educational materials

CLASS SCHEDULE

| Activity | Day | Date | Topic / Activity | Presenter |
|-------------|-----|--------|---|------------|
| Section I | | | Introduction | |
| | | | Global overview of the project: Step by step. (PP Presentation) Global outline of the final project Introduction Literature Review (graduate students) VENDERS Format Vision Theory-based planning Etc Classes & activities Appendixes Curriculum | Instructor |
| | | | Food Demonstrations | |
| | | | Food Demonstrations | |
| | | | Food Demonstrations | |
| Class | Wed | Aug 30 | Opportunities in community nutrition (Boyle & Morris, Ch 1) Activity: Students will form workgroups. Decide what population they will target and contact that population. Set criterias for work in group. | Instructor |
| | | | Test: Self-efficacy on community nutrition | |
| Section II | | | Assessing and planning community nutrition programs | |
| Class | Wed | Sep 6 | General principles of assessment. | Instructor |
| | | | Assessment of resources (Boyle & Morris, Ch 5) | Students |
| | | | Activity: Outline an assessment plan. | |
| Class | Wed | Sep 13 | General principles of assessment. | Instructor |
| | | | Assessment nutritional status (Boyle & Morris, Ch 6) | Students |
| | | | Activity: Design an assessment plan for a target population. | |
| Class | Wed | Sep 20 | Principles to plan community nutrition interventions. | Instructor |
| | | | Designing community nutrition interventions (Boyle & Morris, Ch 8) | Students |
| | | | Activity: Present in class the assessment plan for a target population. | |
| a .: | | | Test for section II | |
| Section III | | | Relevant theories for nutrition education | |
| Class | Wed | Sep 27 | Relevant theories of health behavior change | Instructor |

| | | | Applying theory in practice (Doak, Doak, Root, Ch 2) |
|------------|-----|--------|---|
| | | | Activity: Present a short bibliography identifying key nutrition issues of the target population. |
| Class | Wed | Oct 4 | Relevant theories of health behavior change |
| | | | Activity: Develop or gather the assessment instruments. |
| Class | Wed | Oct 11 | Behavior Modification (Holli & Calabrese, Ch 6) |
| | | | Modifying cognitions (Holli & Calabrese, Ch 7) |
| | | | Activity: Start assessment in the target population (community) |
| Class | Wed | Oct 18 | TEST Section III a & Laboratory work |
| Section IV | | | Nutrition education topics |
| Class | Wed | Oct 25 | Motivation (Holli & Calabrese, Ch 9) |
| | | | Activity: continue assessment in the target population (community) |
| Class | Wed | Nov 1 | Principles and theories of learning (Holli & Calabrese, Ch 10) |
| | | | Designing nutrition intervention based on assessment. |
| | | | Activity: Presentation of results of population assessment |
| Class | Wed | Nov 8 | Curriculum development |
| Class | Wed | Nov 15 | Proposal development: the VENDERS model |
| Class | Wed | Nov 29 | Marketing |
| | | | Planning, selecting, and using media (Holli & Calabrese, Ch 15) |
| | | | Presentations: VENDERS mini proposal |
| Class | Wed | Dec 6 | Presentation of pre-final VENDERS group project |
| | | | Personalized advice to finish major proposal. |
| Class | Wed | Dec 13 | Presentation of final VENDERS group project. |
| | | | Test: Self-efficacy on community nutrition & course evaluation |
| Final Test | Tue | Dec 15 | 12:45-2:45 PM (Turn in final copy of VENDERS Group Project) |

Summary of Assignments

Introduction /Deciding potential intervention. Contact local agency or organization to design a project for them. Report the outcome of your interview with the agency.

Instrumentation for assessment. Bring potential instruments for the assessment of your intervention.

Instrumentation for assessment. Revising and adapting instruments for community assessment. Bring the final instruments.

Assess the target population. Gathering the data for assessing the target community. Bring the raw data to the next lab.

Data analysis. Summarize and analyze the data gathered to plan the appropriate intervention. Bring a summary of your data for next lab.

Plan the goals, objectives, and implementation and evaluation strategies for your program. Get feedback from the agency where you are working about your plan. Turn in a repot from the outcome.

Develop individual presentation outlines. Get feedback from the agency where you are working about the proposed outlines. Turn in a report of the outcome of the interview.

Pretest your program at the agency. Summarize your observations.

Discuss your findings with the class in a short presentation (10-15 minutes).

Turn in the final report of your project.

^{***}Please note that this syllabus is a living document and subject to change as needed.***

Appendix A. Program Planning and Evaluation in Community Nutrition Project Evaluation Criteria

Community assessment and formative research (20%)

Formative research

- Relevant
- Comprehensive
- Parsimonious

Theory based assessment

- Relevance
- Operationalization

Needs assessment

- Relevant
- Comprehensive
- Parsimonious
- Method(s)

Assessment of health beliefs/barriers

- Relevant
- Comprehensive
- Parsimonious
- Adequate methods

Community mapping

- Identified community resources
- Identified stake holders

Literature review section (15%)

- Concise
- Complete
- Focused
- Important definitions
- Overview of the problem
- Description of the target population
- Overview of the problem in the target population
- Purpose of the project
- Rational of the project

Design (20%)

- Parsimonious
- Feasible
- Fill in the 'gap' (ideal---baseline)
- Practical significance
- Integrated
- Goals & objectives
- Goal(s)
 - Outcome objective(s)
 - Process objective(s)
 - Activities and outline of lesson plans

Sustainability of project (5%)

- Community ownership
- Utilization of community resources
- Empowerment of community
- Plan for eventual self-support

Evaluation (10%)

Process evaluation

- Indicators
- Time
- Completeness
- Parsimoniousness

Outcome evaluation

- Markers
- Adequacy
- Completeness
- Parsimoniousness

Statistical analysis

- Adequacy
- Completeness

Behavioral theory (10%)

- Relevance
- Integration
- Operationalization

Management system (5%)

- Instruments
- Budget
- Cost-effectiveness
- Feasibility
- Time line (Gantt Chart)
- Organization chart

Marketing (5%)

- Market segmentation
- Marketing mix
- Marketing plan
- Horizontal marketing
- Vertical marketing

Document format (10%)

- Organization (follows written guidelines)
- References (proper format)

Appendix B. Mini-Project Introduction of Solid Foods Among Infants of Migrant Families of Mexican American Descent Jane R Borja-Mejia

VENDERS Format Proposal by Professor Paul Brantley

Vision:

To teach the mothers of infants attending Inter Care clinic of Eau Claire, Michigan, to introduce proper solid foods according to the development of infants in order to provide the nutrients necessary for good health.

Expected Outcomes:

The mothers will feel confident (self-efficacy) to introduce solid foods at the proper time.

The infants will experience normal growth resulting from good nutrition.

The infants will experience a reduction in the incidence of anemia secondary to iron deficiency.

Needs Assessment:

The literature documents a high incidence of iron deficiency anemia among infants of Mexican-American infants and toddlers. Many of those infants receive late introduction of solid foods. Anemia and retarded growth can be prevented by proper introduction of solid foods.

Description of Curriculum:

The mothers will receive three classes on infant feeding, one per month, during the second trimester of life of the child to increase their feeding skills and confidence. The diet of the infants will be assessed and the nutrition counselor will instruct the mother to make the necessary changes.

The mothers will be instructed about the importance of proper introduction of foods to prevent anemia and promote normal growth.

Evaluation:

The mothers will receive a questionnaire to assess their confidence (self-efficacy) to feed solids to their infants.

The height and weight of the infants will be monitored to assess the growth of the infants.

The hemoglobin of the infants will be evaluated at the 6th and 12th months to check the presence of anemia.

Resources:

| Nutrition instructors (15 hrs) | \$ 450.00 |
|---|------------|
| Pamphlets and visual materials on infant feeding. | \$ 500.00 |
| Physical examination (Regular Medicare exam, 100% Federally Funded) | |
| Hemoglobin tests (Regular Medicare exam, 100% Federally Funded) | |
| Office supplies | \$200.00 |
| Total | \$1,150.00 |

Schedule:

| | Month | | | | | |
|------------------------------------|-------|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Nutrition classes | X | X | X | | | |
| Dietary & self-efficacy assessment | X | X | X | | | X |
| Growth monitoring | X | | X | | | X |
| Hemoglobin test | X | | | | | X |

Mini-Project: A Proposal To Develop The "Proper Feeding Practices For Mexican American Infants" (PFPMAI) Curriculum

Jane R Borja-Mejia

Vision:

To develop a curriculum to teach first generation Mexican -American mothers to introduce solid foods according to the development of infants in order to provide the nutrients necessary for good health.

Expected Outcomes: By taking the PEPMAI curriculum:

The mothers will feel confident (self-efficacy) to introduce solid foods at the proper time.

The infants will experience normal growth resulting from good nutrition.

The infants will experience a reduction in the incidence of anemia secondary to iron deficiency.

Needs Assessment:

The literature documents a high incidence of iron deficiency anemia among infants of Mexican-American infants and toddlers.

Many of those infants receive late introduction of solid foods resulting in anemia and retarded growth.

The mothers lack nutrition education in infant feeding.

Description of Curriculum:

The PEPMAI curriculum will consist of three classes on infant feeding, one per month, during the second trimester of the life of the child.

This curriculum will consist of:

- a) a dietary assessment tool to identify poor feeding practices.
- b) a dietary self-efficacy assessment to test the confidence of the mothers to prepare and provide infant foods.
- c) instructions to prepare and provide adequate amounts of nutritious foods proper for the developmental age of infants.
- d) instructions on hygiene and food safety to prevent food poisoning among infants.

Evaluation:

Measure the changes in the scores of dietary self-efficacy to assess the confidence (self-efficacy) of the mothers to feed solids to their infants.

Dietary assessment to measure the changes in infant feeding practices.

Measuring weight and weight to assess the growth of infants.

Measure hemoglobin levels to assess the presence of anemia.

Resources:

| Curriculum development | |
|---|------------|
| Curriculum developer (2 months, 1/2 FTE) | \$3000.00 |
| Pamphlets and visual materials on infant feeding. | \$ 1500.00 |
| Pretesting Curriculum | |
| Curriculum tester (6 months, 1/4 FTE) | \$ 4500.00 |
| Nutrition instructors (15 hr.) | \$ 450.00 |
| Physical examination (Regular Medicare exam, 100% Federally Funded) | |
| Hemoglobin tests (Regular Medicare exam, 100% Federally Funded) | |
| Office supplies | \$200.00 |
| Total | \$9,650.00 |

Schedule:

| | | | | M | onth | | | | |
|------------------------------------|---|---|---|---|------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Curriculum Development | | | | | | | | | |
| a) Classes | X | X | | | | | | | |
| b) Assessments | X | X | | | | | | | |
| Pretesting Curriculum | | | | | | | | | |
| Implementing curriculum | | | X | X | X | | | | |
| Dietary & self-efficacy assessment | | | X | | | | | X | |
| Growth monitoring | | | X | | X | | | X | |
| Hemoglobin test | | | X | | | | | X | |

| Data analysis & raport results | 37 |
|--------------------------------|----|
| Data analysis & report results | X |

Guide to Write the Assessment Plan & Capacity Mapping

Statement of the problem

Purpose statement (goal)

Main questions or objectives

Focused literature review

Methods

- Population and sample population
- Main variables
- Guiding theory
- Design of data collection
- Data collection instruments
- Gann Chart with timeline
- Budget

Results

Setting priorities to take action

Discussion and conclusion

Recommendations